

WHAT IS CLAIMED IS:

1. A computer-based method of providing a service in real time, said service being one of transcription and translation, comprising the steps of:

5 receiving, from a user, a request for service;

determining if at least one service agent is available to perform said service;

assigning at least one service agent to perform said, if at least one service agent is available; and

providing a result of said service in real time to the user, where the result, in transcription service, is transcribed text of spoken words of at least one speaker, and where, in translation service, the result is a translation of spoken words of at least one speaker; wherein, in transcription service, a service agent is a stenographer; and wherein, in translation service, a service agent is a translator, the spoken words of the at least one speaker are in a first language, and the translation is in a second language.

2. The computer-based method as recited in claim 1, the assigning at least one service agent step comprising the steps of:

determining if there is a user preference concerning the received request;

assigning at least one service agent, if it is determined there is no user preference;

20 determining whether said user preference can be met, if it is determined there is said user preference; and

assigning at least one service agent to perform said service so that said user preference is met.

3. The computer-based method as recited in claim 1, further comprising, if at least one service agent is not available, the step of:

determining an identity of the at least one speaker.

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4. The computer-based method as recited in claim 3, further comprising, if the identity of the at least one speaker is determined, the steps of:

retrieving a speaker profile of said identified at least one speaker; and performing, by means of a computer, speaker-dependent Automatic Speech Recognition (ASR), using said retrieved speaker profile.

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5. The computer-based method as recited in claim 4, wherein the speaker-dependent ASR produces text in a first language, further comprising the step of:

translating said text in a first language to text in a second language.

6. The computer-based method as recited in claim 3, further comprising, if the identity of the at least one speaker is not determined, the steps of:

creating a speaker profile of said unidentified at least one speaker; storing said speaker profile in a speaker profile database; and establishing an identity for said stored speaker profile so that the identity of the at least one speaker is determined.

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7. The computer-based method as recited in claim 6, further comprising the step of:
performing, by means of a computer, speaker-independent Automatic Speech
Recognition, while said speaker profile is being created.

5 8. The computer-based method as recited in claim 6, wherein the establishing an identity for
said stored speaker profile step comprises the steps of:

requesting that the user provide an identity for said stored speaker profile;
receiving an identity from the user; and
storing said user-provided identity as the established identity of said stored speaker
profile.

9. The computer-based method as recited in claim 1, further comprising the steps of:
receiving, by at least one service agent, typed text from the user; and
reading, by at least one service agent, the typed text aloud so that the at least one speaker
may hear.

10. The computer-based method as recited in claim 9, wherein the typed text from the user is
in a second language and the at least one service agent reads it aloud in the first language.

20 11. The computer-based method as recited in claim 1, further comprising the steps of:
receiving, by a text-to-speech synthesizer, typed text from the user; and
speaking, by the text-to-speech synthesizer, the typed text aloud so that the at least one
speaker may hear.

12. The computer-based method as recited in claim 1, further comprising the steps of:
receiving, by at least one translator, a first audio transmission from the user, where the
first audio is speech by the user in the second language;
5 speaking, by the at least one translator, a translation of the first audio transmission into
the first language; and
transmitting, to the at least one speaker, a second audio transmission, where the second
audio is the spoken translation in the first language.

13. The computer-based method as recited in claim 1, wherein the translation is in the form
of text.

14. A method of providing a service in real time, said service being one of transcription and
translation, comprising the steps of:
receiving, from a user, a request for service;
determining if at least one service agent is available to perform said service;
performing, if at least one service agent is available, the following sub-steps:
20 determining if there is a user preference concerning the received service request;
assigning at least one service agent, if it is determined there is no user preference;
determining whether said user preference can be met, if it is determined there is said
user preference; and
assigning at least one service agent to perform said service so that said user
preference is met;

performing, if at least one service agent is not available, the following sub-steps:

determining an identity of the at least one speaker;

retrieving, if the identity of the at least one speaker is determined, a speaker profile of
said identified at least one speaker;

5 performing, by means of a computer, speaker-dependent Automatic Speech

Recognition (ASR), using said retrieved speaker profile;

creating, if the identity of the at least one speaker is not determined, a speaker profile
of said unidentified at least one speaker;

storing said speaker profile in a speaker profile database; and

establishing an identity for said stored speaker profile so that the identity of the at
least one speaker is determined; and

performing, by means of a computer, speaker-independent Automatic Speech
Recognition (ASR), while said speaker profile is being created; and

providing a result of said service in real time to the user, where the result, in transcription
service, is transcribed text of spoken words of at least one speaker, and where, in
translation service, the result is a translation of spoken words of at least one speaker;
wherein, in transcription service, a service agent is a stenographer; and
wherein, in translation service, a service agent is a translator, the spoken words of the at
least one speaker are in a first language, and the translation is in a second language.

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15. The method as recited in claim 14, wherein ASR produces text in a first language, further
comprising the step of:

translating said text in a first language to text in a second language.

16. The method as recited in claim 14, further comprising the steps of:
receiving, by an assigned at least one service agent, typed text from the user; and
speaking, by an assigned at least one service agent, the typed text aloud so that the at
least one speaker may hear.

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17. The method as recited in claim 14, further comprising the steps of:
receiving, by a text-to-speech synthesizer, typed text from the user; and
speaking, by the text-to-speech synthesizer, the typed text aloud so that the at least one
speaker may hear.

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18. The method as recited in claim 14, wherein translation service is performed, further
comprising the steps of:
receiving, by an assigned at least one translator, typed text in a second language from the
user; and
reading, by the assigned at least one translator, the typed text aloud in a first language so
that the at least one speaker may hear.

19. The method as recited in claim 14, further comprising the steps of:
receiving, by a text translating device, typed text in a second language from the user;
translating the typed text in a second language to a first language; and
reading, by a text-to-speech synthesizer, the typed text in a first language aloud so that
the at least one speaker may hear.

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20. A system of providing a service in real time, said service being one of transcription and translation, comprising:

means for receiving, from a user, a request for service;

5 means for determining if at least one service agent is available to perform said service;

means for assigning at least one service agent to perform said service, if at least one service agent is available; and

means for providing a result of said service in real time to the user, where the result, in transcription service, is transcribed text of spoken words of at least one speaker, and where, in translation service, the result is a translation of spoken words of at least one speaker;

wherein, in transcription service, a service agent is a stenographer;

wherein, in translation service, a service agent is a translator, the spoken words of the at least one speaker are in a first language, and the translation is in a second language.

21. The system as recited in claim 20, wherein the provided service is translation, the system further comprising:

means for receiving, by an assigned at least one translator, typed text in a second language from the user; and

20 means for broadcasting an audio transmission, where the audio is the typed text spoken aloud in the first language, by an assigned at least one translator, so that the at least one speaker may hear.

22. The system as recited in claim 20, wherein the provided service is translation, the system further comprising:

means for receiving, by an assigned at least one translator, a first audio transmission from the user, where the first audio is speech by the user in the second language;

5 means for making a second audio transmission from a translation, spoken by an assigned at least one translator, of the first audio transmission into the first language; and

means for transmitting, to the at least one speaker, the second audio transmission.

23. The system as recited in claim 20, wherein the means for assigning at least one service agent to perform said service, if at least one service agent is available, comprises:

means for determining if there is a user preference concerning the received request;

means for assigning at least one service agent, if it is determined there is no user preference;

means for determining whether said user preference can be met, if it is determined there is said user preference; and

means for assigning at least one service agent to perform said service so that said user preference is met.

24. The system as recited in claim 20, the system further comprising:

20 means for performing Automatic Speech Recognition (ASR) in order to provide a transcription of the spoken words of at least one speaker, comprising:

means for determining an identity of the at least one speaker;

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means for retrieving a speaker profile, if the identity of the at least one speaker is determined, said speaker profile being of said identified at least one speaker; means for performing speaker-dependent ASR, using said retrieved speaker profile; means for creating a speaker profile, if the identity of the at least one speaker is not determined, of said unidentified at least one speaker; means for storing said created speaker profile in a speaker profile database; and means for establishing an identity for said stored speaker profile so that the identity of the at least one speaker is determined; and means for performing speaker-independent ASR, while said means for creating a speaker profile is operating.

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25. The system as recited in claim 20, wherein the provided service is translation, the system further comprising:

means for receiving, by one of an assigned at least one stenographer or a text-to-speech synthesizer, typed text from the user; and means for broadcasting an audio transmission, where the audio is the typed text spoken aloud, by one of the assigned at least one stenographer or the text-to-speech synthesizer, so that the at least one speaker may hear.

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26. A computer system for providing a service in real time, said service being one of transcription and translation, the computer system comprising:
at least one computer-readable memory including:
code that receives, from a user, a request for service;

code that determines if at least one service agent is available to perform said service;
code that assigns at least one service agent to perform said service, if at least one
service agent is available; and
code that provides a result of said service in real time to the user, where the result, in
transcription service, is transcribed text of spoken words of at least one speaker,
and where, in translation service, the result is a translation of spoken words of at
least one speaker;
wherein, in transcription service, a service agent is a stenographer;
wherein, in translation service, a service agent is a translator, the spoken words of the at
least one speaker are in a first language, and the translation is in a second language.

27. The computer system as recited in claim 26, wherein the code that assigns at least one
service agent comprises:

code that determines if there is a user preference concerning the received request;
code that assigns at least one service agent, if it is determined there is no user preference;
code that determines whether said user preference can be met, if it is determined there is
said user preference; and
code that assigns at least one service agent to perform said service so that said user
preference is met.

28. The computer system as recited in claim 26, wherein the at least one computer-readable
memory further includes:

code that determines an identity of the at least one speaker.

29. The computer system as recited in claim 28, wherein the at least one computer-readable memory further includes:

code that retrieves a speaker profile, if the identity of the at least one speaker is determined, said speaker profile being of said identified at least one speaker; and code that performs speaker-dependent Automatic Speech Recognition, using said retrieved speaker profile.

30. The computer system as recited in claim 29, wherein the speaker-dependent ASR produces text in a first language, the at least one computer-readable memory further includes: code that translates said text in a first language to text in a second language.

31. The computer system as recited in claim 28, wherein the at least one computer-readable memory further includes:

code that creates a speaker profile, if the identity of the at least one speaker is not determined, of said unidentified at least one speaker; code that stores said speaker profile in a speaker profile database; and code that establishes an identity for said stored speaker profile so that the identity of the at least one speaker is determined.

32. The computer system as recited in claim 31, wherein the at least one computer-readable memory further includes:

code that performs speaker-independent Automatic Speech Recognition, while said code that creates a speaker profile is running.

33. The computer system as recited in claim 31, wherein the code that establishes an identity for said stored speaker profile comprises:

code that requests that the user provide an identity for said stored speaker profile;

code that receives an identity from the user; and

code that stores said user-provided identity as the established identity of said stored speaker profile.

34. The computer system as recited in claim 26, further comprising:

at least one computer-readable memory including:

code that transmits, from the user to at least one service agent, text typed in by the user; and

code that transmits, from the at least one service agent to the user, an audio transmission, where the audio is the typed text spoken aloud by the at least one service agent.

35. The computer system as recited in claim 34, wherein the typed text from the user is in a second language and the at least one service agent reads it aloud in the first language.

20 36. The computer system as recited in claim 26, further comprising:

at least one computer-readable memory including:

code that transmits, from the user to a text-to-speech synthesizer, text typed in by the user; and

code that transmits, from the text-to-speech synthesizer to the user, an audio transmission, where the audio is the typed text spoken aloud by the text-to-speech synthesizer.

37. The computer system as recited in claim 26, wherein the service is translation, the computer system further comprising:

at least one computer-readable memory including:

code that transmits, from the user to at least one translator, a first audio transmission from the user, where the first audio is speech by the user in the second language; and

code that transmits, from the at least one translator to the user, a second audio transmission, where the audio is a translation in the first language, spoken by the at least one translator, of the first audio.

38. A computer-based method of providing a service in real time, said service being one of transcription and translation, comprising the steps of:

receiving, from a user, a request for service, said request including service parameters, said service parameters including a date, a starting time, and an ending time for the service; and

providing a result of said service in real time to the user;

wherein, in transcription service, a service agent is a stenographer and the result of service is transcribed text of spoken words of at least one speaker; and wherein, in translation service, a service agent is a translator, the spoken words of the at least one speaker are in a first language, the translation is in a second language, and the result of service is a translation of spoken words of at least one speaker.

39. The computer-based method as recited in claim 38, further comprising the step of: soliciting bids from a pool of service agents, each of said bids indicating a monetary amount for which a service agent will perform the service.
40. The computer-based method as recited in claim 38, further comprising the step of: receiving, or not receiving, at least one bid, each of at least one bid indicating a monetary amount for which a service agent will perform the service.
41. The computer-based method as recited in claim 38, further comprising the step of: automatically generating at least one bid, said at least one automatically generated bid indicating a monetary amount for which the requested service will be performed.
42. The computer-based method as recited in claim 41, wherein, for the at least one automatically generated bid, a computing means will perform the service, and the at least one automatically generated bid is determined based on the computing means meeting specified service parameters.

43. The computer-based method as recited in claim 40, further comprising the step of:
notifying the user of the at least one received bid.

44. The computer-based method as recited in claim 40, further comprising the step of:
5 accepting, if there is at least one bid, a lowest bid, said acceptance being made
automatically at a predetermined time.

45. The computer-based method as recited in claim 40, further comprising the step of:
receiving a response from the user, said response having instructions concerning service
performance, and said response being in response to information concerning service
performance.

46. The computer-based method as recited in claim 45, wherein the instructions concerning
service performance in the response indicates one of the group of acceptance of a bid, non-
acceptance of any bid, and a desire to use Automatic Speech Recognition (ASR) instead.

47. The computer-based method as recited in claim 45, wherein the information concerning
service performance is one of the group comprised of a notification of a received bid and an
access of received bids posted in a file accessible on a network.

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48. The computer-based method as recited claim 38, wherein, after the receiving a request for
service step, the method further comprises the steps of:

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determining whether any service agent on a list of service agents is capable of performing said service with said service parameters;
generating, if at least one service agent on the list of service agents is capable of performing said service with said service parameters, a pool of service agents that are capable of performing said service with said service parameters; and
determining, if no service agent on the list of service agents is capable of performing said service with said service parameters, whether the user wishes to use Automatic Speech Recognition (ASR) to perform said service.

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49. The computer-based method as recited in claim 48, wherein, if at least one service agent on the list of service agents is capable of performing said service with said service parameters, the method further comprises the steps of:

notifying the pool of service agents of the request for service;
receiving, or not receiving, at least one bid, each of at least one bid indicating a monetary amount for which a service agent will perform the service;
notifying the user of the at least one bid, or lack thereof; and
receiving a response to the notification from the user, said response having instructions concerning service performance.

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50. The computer-based method as recited in claim 49, wherein the instructions concerning service performance in the service response indicates one of the group of acceptance of a bid, non-acceptance of any bid, and a desire to use ASR instead.

51. The computer-based method as recited in claim 48, wherein the determining, if no service agent on the list of service agents is capable of performing said service with said service parameters, whether the user wishes to use Automatic Speech Recognition (ASR) to perform said service step comprises the steps of:

5 determining whether the user wishes to use ASR;
 receiving, if the user wishes to use ASR, additional service parameters from the user;
 generating at least one bid, said at least one bid determined based on a computing means meeting all service parameters; and
 displaying the generated at least one bid;
 wherein the response from the user indicates an acceptance of a bid, or a non-acceptance of all bids; and
 wherein, if the response indicates non-acceptance, the method ends.

52. The computer-based method as recited in claim 51, wherein the ASR produces text in a first language, further comprising the step of:
 translating said text in a first language to text in a second language.

53. The computer-based method as recited in claim 38, wherein the real-time service is performed by a team of service agents.

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54. The computer-based method as recited in claim 38, further comprising the steps of:
 receiving, by the at least one service agent, typed text from the user; and

speaking, by the at least one service agent, the typed text aloud so that the at least one speaker may hear.

55. The computer-based method as recited in claim 54, wherein the typed text from the user is in a second language and the at least one service agent reads it aloud in the first language.

56. The computer-based method as recited in claim 38, further comprising the steps of: receiving, by a text-to-speech synthesizer, typed text from the user; and speaking, by the text-to-speech synthesizer, the typed text aloud so that the at least one speaker may hear.

57. The computer-based method as recited in claim 38, further comprising the steps of: receiving, by an assigned at least one translator, a first audio transmission from the user, where the first audio is speech by the user in the second language; speaking, by an assigned at least one translator, a translation of the first audio transmission into the first language; and transmitting, to the at least one speaker, a second audio transmission, where the second audio is the spoken translation in the first language.

20 58. The computer-based method as recited in claim 38, wherein the translation is in the form of text.

59. A method of providing a service in real time, said service being one of transcription and translation, comprising the steps of:

5 receiving, from a user, a request for service, said request including service parameters, said service parameters including a date, a starting time, and an ending time for the service;

determining whether any service agent on a list of service agents is capable of performing said service with said service parameters;

performing, if at least one service agent on the list of service agents is capable of performing said service with said service parameters, the sub-steps of:

generating a pool of service agents that are capable of performing said service with said service parameters;

notifying the pool of service agents of the request for service;

receiving, or not receiving, at least one bid, each of at least one bid indicating a monetary amount for which a service agent will perform the service; and

notifying the user of the at least one bid, or lack thereof;

performing, if no service agent on the list of service agents is capable of performing said service with said service parameters, the sub-steps of:

determining whether the user wishes to use Automatic Speech Recognition (ASR) to perform said service;

20 receiving, if the user wishes to use ASR, additional service parameters from the user;

generating at least one bid, said at least one generated bid determined based on a computing means meeting all service parameters; and

notifying the user of the generated at least one bid;
receiving a response from the user, said response being to a notification of at least one bid, and
providing a result of said service in real time to the user;
wherein, in transcription service, a service agent is a stenographer and the result of service is transcribed text of spoken words of at least one speaker; and
wherein, in translation service, a service agent is a translator, the spoken words of the at least one speaker are in a first language, the translation is in a second language, and the result of service is a translation of spoken words of at least one speaker.

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60. A system for providing a service in real time, said service being one of transcription and translation, comprising:
means for receiving, from a user, a request for service, said request including service parameters, said service parameters including a date, a starting time, and an ending time for the service; and
means for providing a result of said service in real time to the user;
wherein, in transcription service, a service agent is a stenographer and the result of service is transcribed text of spoken words of at least one speaker; and
wherein, in translation service, a service agent is a translator, the spoken words of the at least one speaker are in a first language, the translation is in a second language, and the result of service is a translation of spoken words of at least one speaker.

61. The system as recited in claim 60, further comprising:

means for soliciting bids from a pool of service agents, each of said bids indicating a monetary amount for which a service agent will perform the service.

62. The system as recited in claim 60, further comprising:

5 means for receiving at least one bid, each of at least one bid indicating a monetary amount for which a service agent will perform the service.

63. The system as recited in claim 60, further comprising:

means for automatically generating at least one bid, said at least one automatically generated bid indicating a monetary amount for which the requested service will be performed.

64. The system as recited in claim 60, further comprising:

a computing means for performing the requested service.

65. The system as recited in claim 62, further comprising:

means for notifying the user of the at least one received bid.

66. The system as recited in claim 62, further comprising:

20 means for accepting, if there is at least one received bid, a lowest bid, said acceptance being made automatically at a predetermined time.

67. The system as recited in claim 62, further comprising:

means for receiving a response from the user, said response having instructions concerning service performance, and said response being in response to information concerning service performance.

5 68. The system as recited in claim 67, wherein the instructions concerning service performance in the response indicates one of the group of acceptance of a bid, non-acceptance of any bid, and a desire to use Automatic Speech Recognition (ASR) instead.

69. The system as recited in claim 67, wherein the information concerning service performance is one of the group comprised of a notification of a received bid and an access of received bids posted in a file accessible on a network.

70. A computer system for providing a service in real time, said service being one of transcription and translation, comprising:

at least one computer-readable memory including:
code that receives, from a user, a request for service, said request including service parameters, said service parameters including a date, a starting time, and an ending time for the service; and
code that provides a result of said service in real time to the user;

20 wherein, in transcription service, a service agent is a stenographer and the result of service is transcribed text of spoken words of at least one speaker; and

wherein, in translation service, a service agent is a translator, the spoken words of the at least one speaker are in a first language, the translation is in a second language, and the result of service is a translation of spoken words of at least one speaker.

5 71. The computer system as recited in claim 70, wherein the at least one computer-readable memory further comprises:

code that solicits bids from a pool of service agents, each of said bids indicating a monetary amount for which a service agent will perform the service.

10 72. The computer system as recited in claim 70, wherein the at least one computer-readable memory further comprises:

code that receives at least one bid, each of at least one bid indicating a monetary amount for which a service agent will perform the service.

15 73. The computer system as recited in claim 70, wherein the at least one computer-readable memory further comprises:

code that automatically generates at least one bid, said at least one automatically generated bid indicating a monetary amount for which the requested service will be performed.

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74. The computer system as recited in claim 70, wherein the at least one computer-readable memory further comprises:

code that performs the requested service.

75. The computer system as recited in claim 72, wherein the at least one computer-readable memory further comprises:

code that notifies the user of the at least one received bid.

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76. The computer system as recited in claim 72, wherein the at least one computer-readable memory further comprises:

code that accepts, if there is at least one received bid, a lowest bid, said acceptance being made automatically at a predetermined time.

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77. The computer system as recited in claim 72, wherein the at least one computer-readable memory further comprises:

code that receives a response from the user, said response having instructions concerning service performance, and said response being in response to information concerning service performance.

78. The computer system as recited in claim 77, wherein the instructions concerning service performance in the response indicates one of the group of acceptance of a bid, non-acceptance of any bid, and a desire to use Automatic Speech Recognition (ASR) instead.

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79. The computer system as recited in claim 77, wherein the information concerning service performance is one of the group comprised of a notification of a received bid and an access of received bids posted in a file accessible on a network.

80. A method of selling real time transcription services comprising the steps of:
receiving, from a user, a request for transcription service, said request including service
parameters, said service parameters including a date, starting time, and an ending
time;

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displaying said request;
receiving bids to perform said transcription service, each of said bids indicating a
monetary amount for which a stenographer will perform said transcription service;
and

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displaying said received bids;
whereby the user chooses whether to accept one of said displayed bids.

81. The method as recited in claim 80, wherein there is a time limit for receiving bids, the
method further comprising the steps of:

closing the display of received bids when the time limit is reached;
notifying the user of final received bids when the time limit is reached; and
receiving a response from the user to the final received bids.

82. The method as recited in claim 81, further comprising the step of:
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providing, in real time, a transcribed text of spoken words of at least one speaker, said
transcription being provided in accordance with the request and the response from the
user.

83. A method of selling real time translation services comprising the steps of:
receiving, from a user, a request for translation service, said request including service
parameters, said service parameters including a first language spoken by at least one
speaker, a second language to be read by the user, a date, a starting time, and an
ending time;
5 displaying said request;
receiving bids to perform said translation service, each of said bids indicating a monetary
amount for which a translator will perform said translation service; and
displaying said received bids;
whereby the user chooses whether to accept one of said displayed bids.

84. The method as recited in claim 83, wherein there is a time limit for receiving bids, the
method further comprising the steps of:

closing the display of received bids when the time limit is reached;
notifying the user of final received bids when the time limit is reached; and
receiving a response from the user to the final received bids.

85. The method as recited in claim 84, further comprising the step of:
providing, in real time, a translated text of spoken words of at least one speaker, said
20 translated text being in the second language, said spoken words being in a first
language, said translation being provided in accordance with the request and the
response from the user.